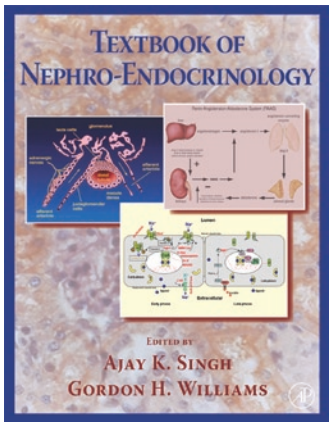
Kidney International (2009) **75**, 1127–1128. doi:10.1038/ki.2009.132

Textbook of Nephro-Endocrinology



Edited by Ajay K. Singh and Gordon H. Williams

Academic Press, 2009
522 pp, hardcover, US$165
ISBN 9780123738707

Reviewed by John Feehally

As the two editors point out in their preface, it has been 25 years since the last book on nephro-endocrinology, edited by Dr. Michael Dunn, was published, and it was a mainstay on the shelves of academic nephrologists and renal scientists for many years. There is no doubt that since then there has been an explosion of knowledge about the physiology and pathophysiology of hormones related to the kidney—the kidney both as a hormonal synthesizer and regulator, and also as a hormonal target—issues well encompassed by the term 'nephro-endocrinology.'

The two editors, nephrologist Ajay Singh and endocrinologist Gordon Williams, are colleagues at the Brigham and Women's Hospital and Harvard Medical School, Boston, USA. They have assembled 54 contributors for this book, of whom only eight come from outside the United States, with none from the Asian Pacific region—perhaps a disadvantage if they seek an international readership.

The core of the book covers erythropoietin; vitamin D, parathyroid hormone, and phosphate regulation; the renin–angiotensin system; antidiuretic hormone; atrial natriuretic peptides; and aldosterone.

For each hormone system there is a brief and often engaging historical perspective with some interesting insights, but these vary considerably in length. There then follow chapters reviewing molecular biology, gene regulation, hormonal actions within and beyond the kidney, and relevant pathophysiological processes encountered in kidney disease. They are in general up to date and accessible for the non-specialist. However, the extent to which pathophysiology and clinical implications are explored is varied. For example, only two pages are devoted to disordered parathyroid hormone regulation in chronic kidney disease, with almost no coverage of therapeutic issues, whereas entire chapters are devoted to diabetes insipidus and to the development of recombinant erythropoietin and the therapeutic use of erythropoiesis-stimulating agents in chronic kidney disease.

The editors have also included within the scope of this book a final section on endocrine disorders occurring in renal failure, including insulin resistance and diabetes; disorders of growth, thyroid, and sex hormones; and finally, metabolic acidosis, an entity with many ramifications far beyond conventional understanding of endocrinology. Perhaps the publication team thought that these inclusions would make the book more attractive to clinical nephrologists, but it does in truth seem a slightly uncomfortable alliance, and as I worked through this section I found myself thinking that they would have been better served by restricting themselves to the primary focus of the first 400 pages, with its strong emphasis on physiology and pathophysiology within the kidney—a very focused text that would have a well-defined niche.

After seeing the colorful front cover, it is also something of a disappointment to open the book and find it mostly in black and white. The figures are in general perfectly clear, and it is perhaps a reflection of a modern era when complex computer-generated color-filled figures are an everyday part of our learning that a book without them seems less engaging and stimulating. But the reader does need to work a little harder, for example, when confronted by a graph using different shadings of gray rather than color to distinguish among a cluster of vertical bars. There are a small number of color plates, but these are hidden at the back of the book and will not be apparent unless the reader is referred to one of these few specific figures or happens to flick to the back of the index.

John Feehally is at the John Walls Renal Unit, Leicester General Hospital, Leicestershire, UK.
E-mail: jf27@le.ac.uk

http://www.kidney-international.org

Will the reader reach for this volume rather than one of the major multivolume texts on renal disease with a strong emphasis on pathophysiology—for example, those edited by Brenner or Schrier? Well, certainly for convenience, as this is a relatively lightweight volume to handle, and it does bring together excellent up-to-date reviews of current understanding, with an encouraging smattering of references from 2007 and 2008 given the long lead time always necessary in bringing a book of this sort to market.

All in all, this is a solid book that provides substantial up-to-date information on endocrine aspects of the kidney. I will be glad to pull it down from my shelf rather than one of the true heavyweights to which I would previously have gone for this kind of reading. However, with rather tighter editorial control of chapter structure and content, I think this could have been a slimmer and in some senses more satisfying book.